

Quarterly Epidemiologic Report

Jan – Mar '05

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Disease of the Quarter: Measles (Rubeola)

Measles case confirmed in Maricopa County in January

The first confirmed case of measles in Maricopa County since 2003 was identified in an adult male visitor to Arizona State University, Main Campus in January. Notably, there was only one confirmed measles case in 2003. Prior to that, the last measles case in a Maricopa County resident was in 2001; however, the disease was acquired elsewhere. As in the 2001 case, the current individual was originally infected outside of the United States. An intensive epidemiological investigation ensued to notify the public of potential sites of exposure and to track down individuals who may have been exposed at these locations, were not immunized against measles, did not have a history of measles disease and were born after 1956. Persons born in 1956 or earlier are likely to have had measles as children and are immune. No other cases were identified in the investigation.

According to the National Immunization Program (NIP) measles is one of the most infectious diseases in the world. The measles vaccine, introduced in 1963, has led to a 99% reduction in the incidence of measles. Two doses of the vaccine are recommended for children between the ages of 5 and 19 years to ensure adequate protection.

What is measles?

Measles is a highly contagious viral disease. It normally grows in the cells that line the back of the throat and in the cells that line the lungs. When infected people sneeze or cough, droplets spray into the air and remain active and contagious on surfaces for up to 2 hours.

What are the symptoms?

Symptoms appear 10-12 days after exposure to the virus. The infected person experiences a fever lasting 2-4 days followed by onset of cough, runny nose, and/or pink eye (conjunctivitis). The rash, which usually begins on the face and upper neck and gradually spreads downward and outward, appears about 14 days after exposure and last 5-6 days.

How serious is the disease?

Approximately 20% of people who get the disease experience complications ranging from an ear infection to pneumonia. One out of every 1,000 will develop encephalitis, and about one out of every 1,000 will die.

Is vaccination necessary?

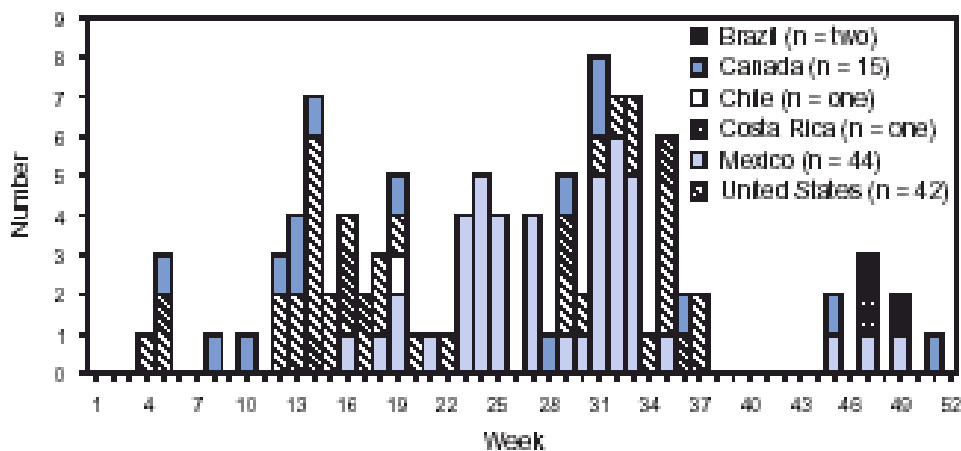
The introduction of the measles vaccine has led to a 99% reduction in measles cases in the U.S. compared with the pre-vaccine era. The MMR vaccine is a live, attenuated (weakened), combination vaccine that protects against measles, mumps, and rubella viruses. This vaccine contains the safest and most effective forms of each vaccine. Although the number of measles cases in the U.S. has been reduced to the lowest number ever reported, it is still very common in other parts of the world. As seen here in Maricopa County, visitors to the U.S. from these countries and U.S. travelers may unknowingly bring the disease to the U.S. Being vaccinated protects us from getting infected.

Is measles still a problem in the U.S.?

Measles is still seen among visitors to the U.S. and among U.S. travelers returning from countries. However, because most people in the U.S. are vaccinated, the number of cases

seen here is usually small. As reported in the MMWR {April 16, 2004/53(14):304-306; <http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5314a2.htm>}, in 2003 there were 42 cases of confirmed measles cases in the U.S (see figure below). Of those, 33 were imported or linked to an importation and the remaining nine were of unknown origin.

FIGURE. Number of confirmed measles cases*, by week and country — Region of the Americas, 2003



* As of February 21, 2004, N = 105.

For more information on measles and recommendations on the measles vaccine, visit the National Immunization Program section on measles: <http://www.cdc.gov/nip/diseases/measles/default.htm>

West Nile Virus Surveillance Information for 2005

It's that time of year again! State and local health officials have resumed enhanced surveillance of mosquito pools, sentinel chicken flocks, horses with neurologic disease, dead bird submissions, and humans with viral nervous system infections.



To date, one (1) WNV positive mosquito pool has been identified in the north Mesa area of Maricopa County. The proactive surveillance efforts by the county led to the identification of this infected pool more than a month earlier than the typical mosquito-breeding season. Statewide, one (1) other WNV positive mosquito pool was identified in Pinal County in the Casa Grande area. A new, in-house rapid test allows for faster turnaround time in getting results on infected mosquitoes.

In addition to the new rapid test, other changes to this year's surveillance include updates to the fogging protocol, an improved hotline system, and additions to the WNV website. The website includes on-line reporting tools, information for kids, important links for more information, updated statistics, and an option to register for WNV information updates via email. The website is also available in Spanish. The WNV website is: <http://www.maricopa.gov/wnv/>.



Maricopa County is making a concerted effort to reduce fogging. When necessary, fogging will occur in small "spot" locations. Notifications of fogging will be posted at: <http://www.maricopa.gov/wnv/fogging/default.aspx>. In addition, the residents in the area to be fogged will receive at least a 24 hour notice via door hangers and notices.

Maricopa County Environmental Services is accepting dead birds for WNV testing. There are five (5) dead bird drop-off locations throughout the valley. For location sites and more dead bird information: http://www.maricopa.gov/ENVSVC/FORMS/deadbird_start.asp.

Dead birds cannot be tested if they are:

- √ A pigeon or dove
- √ Dead longer than 24 hours
- √ A baby bird

Or the carcass is:

- √ Soft and mushy
- √ Hard and crusty
- √ Contains maggots or other insects
- √ Has an odor

Events

National Alcohol Screening Day ~ April 7, 2005

National Alcohol Screening Day is an annual event that provides information about alcohol and health as well as free, anonymous screening for alcohol-use disorders. Event sites are located in community, college, primary health care, military and employment settings. The

program is designed to provide outreach, screening and education about alcohol's effects on health for the general public. The theme, "Alcohol and Health: Where do you draw the line?" focuses on a broad health message that is applicable to anyone who drinks alcohol.

Register online at:

<http://www.nationalalcoholcreeningday.org/alcohol/registration/2005/NASD/index.aspx>



Joint Vector-Borne/Zoonotic Diseases and Bioterrorism/Public Health Threats Conference April 12-14, 2005

Presented by:

Arizona Department of Health Services

This joint conference will provide both an Arizona and a national perspective on these two exciting and ever-changing fields of public health and safety. With emerging diseases such as Avian Influenza, as well as the constant challenges of Rocky Mountain Spotted Fever and West Nile Virus, the need to understand vector-borne and zoonotic diseases has never been greater. Featuring a combination of local and national experts, attendees will hear the latest updates on vector-borne and zoonotic diseases in the Southwest.

5th Annual Bioterrorism and Public Health Threats Conference

This conference will provide the opportunity to learn about emergency preparedness and response in Arizona, as well as how our nation is getting ready for potential threats. Join a diverse audience with representatives from the public health, emergency management, hospital, and first responder communities as we explore the threat of terrorism and emerging diseases. This conference will showcase not only the people and the programs, but also the latest technology.

Training Workshops

This two day joint conference will be followed by a day of interactive workshops for more specific information and training.

To register, go to: http://pub.azdhs.gov/bioreg2/registration/m_form1.cfm



May 8th-14th is National Women's Health Week!

This is a national effort to raise awareness about steps women can take to improve their health. For more information on National Women's Health Week and to find activities in your area, visit:

<http://www.azdhs.gov/whweek/nwhw.pdf>

Communicable disease reporting FAQ's

What diseases are reportable?

There are 73 communicable diseases that are reportable to MCDPH. For a complete list of reportable diseases, visit: <http://www.azdhs.gov/phs/oids/downloads/rptlist.pdf>

When should I report these diseases to MCDPH?

Most disease reports should be submitted within 5 working days of diagnosis, treatment, or detection. However, certain diseases are reportable within 24 hours of diagnosis or during an outbreak. Again, for a complete list and proper reporting timelines, consult this site: <http://www.azdhs.gov/phs/oids/downloads/rptlist.pdf>

What information is required?

Submit a Communicable Disease Report (CDR) form (see image below) to MCDPH by mail at: 1010 E McDowell, Ste 300 Phx, Az 85006 or fax (602) 372-2630.

Communicable Disease Report Important Instructions on Reverse Side - Please print or type Send completed forms to your county or tribal health agency				County/IHS ID number:		State ID Number	
Date Received by County:				Date of birth		Sex <input type="checkbox"/> Male <input type="checkbox"/> Female	
Patient's name (Last) (First) (Middle Initial)				Race <input type="checkbox"/> (1) White <input type="checkbox"/> (3) Black <input type="checkbox"/> (4) Asian/Pac. Isl <input type="checkbox"/> (5) Nat American <input type="checkbox"/> (8) Other <input type="checkbox"/> (9) Unknown		Ethnicity <input type="checkbox"/> Hispanic <input type="checkbox"/> Non-Hispanic <input type="checkbox"/> Unknown	
Street address				Telephone no:		Pregnant <input type="checkbox"/> Yes <input type="checkbox"/> No	
Mailing address (if different than above)				County or Tribal Residence		Census tract	
City or Town				State		Zip code	
Diagnosis or suspect reportable condition				Laboratory test		Specimen Type:	
Date of onset		Date of diagnosis		Laboratory results		Date Collected:	
Patient's occupation or school						Date Finalized:	
Physician or other reporting source				Telephone no:		Facility	
Street address				City		State	
				Zip code		Local Health Agency use only <input type="checkbox"/> Confirmed case <input type="checkbox"/> Probable case <input type="checkbox"/> Outbreak Associated <input type="checkbox"/> Ruled out/ Non case	

Original and 1st copy to County/Tribal Health Department ☐ Check if additional forms are needed (Quantity) ADHS/IDES-1(Rev.9-04)

For more information on communicable disease reporting, here are some other useful links:

MCDPH: http://www.maricopa.gov/public_health/comdis.asp

ADHS: <http://www.azdhs.gov/phs/oids/rptlist.htm#Which%20communicable%20diseases%20are%20reportable>

Maricopa County Communicable Disease Summary
Confirmed and probable reported cases
2003-2005
1st Quarter (as of March 30, 2005)

	Yearly totals		
Disease	2005* YTD	2004 YTD	2003 YTD
Amebiasis	4	5	9
Anthrax	0	0	0
Aseptic Meningitis: viral	126	94	59
Botulism	0	0	0
Botulism, Infant	0	0	0
Brucellosis	1	0	1
Campylobacteriosis	86	71	81
Cholera	0	0	0
Coccidioidomycosis (valley fever)	123	298	196
Colorado tick fever	0	0	0
Congenital Rubella	0	0	0
Conjunctivitis: acute	4	0	0
Creutzfeldt-Jakob disease	1	0	1
Cryptosporidiosis	2	0	1
Dengue	1	0	0
Diphtheria	0	0	0
Ehrlichiosis	0	0	0
Encephalitis: viral	0	5	5
<i>Escherichia coli</i> O157:H7	5	2	0
Giardiasis	9	35	30
H. influenzae: Invasive	25	19	21
Hansen's disease (Leprosy)	0	0	0
Hantavirus	0	0	0
Hepatitis A	12	17	33
Hepatitis B	239	257	223
Hepatitis C	191	445	429
Hepatitis D	0	0	0
Hepatitis Non-A, Non-B	0	0	0
Legionellosis	5	2	4
Leptospirosis	0	0	0
Listeriosis	1	2	3
Lyme Disease	6	3	2
Malaria	2	1	1
Measles	1	0	1
Meningococcal Invasive	9	2	7
Mumps	0	0	1
Pertussis (whooping cough)	56	36	22
Plague	0	0	0
Poliomyelitis	0	0	0
Source: MCDPH Communicable Disease Reporting system, 3/30/05.			
*2005 counts are underestimates of the actual count due to delays in data entry.			

Maricopa County Communicable Disease Summary
Confirmed and probable reported cases
2003-2005

1st Quarter (as of March 30, 2005)

Disease	Yearly totals		
	2005* YTD	2004 YTD	2003 YTD
Psittacosis	0	0	0
Q Fever	0	1	1
Rabies exposure	4	3	0
Relapsing fever (Borreliosis)	0	0	0
Reye syndrome	0	0	0
Rocky Mountain spotted fever	0	0	0
Rubella	0	1	1
Salmonellosis	50	67	60
Scabies	36	1	5
Severe acute respiratory syndrome	0	0	0
Shigellosis	28	41	48
Streptococcus pneumoniae	113	118	162
Streptococcal Group A: invasive	64	149	79
Streptococcal Group B: invasive	21	81	16
Taeniasis	0	0	1
Tetanus	0	0	0
Toxic shock syndrome (TSS)	0	1	2
Trichinosis	0	0	0
Tularemia	0	0	0
Typhoid Fever	1	2	0
Typhus Fever	0	0	1
Vancomycin-resistant Enterococcus	258	244	189
Varicella (chickenpox)	312	464	263
Vibrio infection	0	0	1
West Nile virus	2	2	0
Yellow fever	0	0	0
Yersiniosis	0	1	1
Source: MCDPH Communicable Disease Reporting system, 3/30/05.			
*2005 counts are underestimates of the actual count due to delays in data entry.			

<p align="center">MCDPH Divisions of Epidemiology and BDPR</p> <p align="center">Contact Numbers (all 602 area code)</p>
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Vjollca Berisha	Senior Epidemiologist	372-2611
Kristin Cass	Executive Assistant	372-2604
Marcos Coria	MCH Data Analyst	372-2632
Alisa Diggs	Epidemiologist	372-2612
Andrew Edmonds	Surveillance Data Analyst	372-2619
Abrium Escárzaga	BT Epidemiologist	372-2643
Robert French	Deputy Director, BDPR	372-2658
Natalie Fuller	Surveillance Data Analyst	372-2613
Jeanette Gibbon	Epidemiologist	372-2642
Robert Jones	Medical Dir, Surveillance/BDPR	372-2650
Ron Klein	Disease Surveillance Sup	506-6722
Chris Mahon	Program Admin, CHN	506-6771
Karen Moffitt	Senior Epidemiologist	372-2636
Liva Nohre	Senior Epidemiologist	372-2631
David Dubé	Interim Director, Chronic Disease	372-8402
Sarah Santana	Director, Epidemiology	372-2601
Mare Schumacher	Deputy Director, Epidemiology	372-2602
Jennifer Stewart	Epidemiologist	372-2621
Heather Wanatowicz	Administrative Supervisor	372-2605
Gary West	Statistical Programmer	372-2603

To report communicable diseases, unusual health occurrences, and public health emergencies
(all 602 area codes unless otherwise noted)

	Business hours M-F 8a-5p	After 5p
Bite reports	506-7387	506-7387
Communicable diseases	506-6767	747-7111
Death/birth certificates, funeral homes, human remains	506-6805	450-9982 or 229-9315
HIV (reports)	506-6426	Next business day
Public health emergencies	747-7111	747-7111
Rabies exposure	779-1358	747-7111
STDs (other than HIV)	506-1678	Next business day
TB	506-5065 or 372-1408	747-7111

<p>For change of name or address or to be removed or added to this mailing list, please e-mail Jeanette Gibbon at: jeanettegibbon@mail.maricopa.gov or call (602) 372-2642.</p>
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